

INVITATION FOR BIDS (IFB) NO. 97-095
TO
FURNISH AND DELIVER
AUDIO VISUAL EQUIPMENT
FOR
INFORMATION TECHNOLOGY SERVICES
UNIVERSITY OF HAWAII
HONOLULU, HAWAII

MAY, 1997

BOARD OF REGENTS
UNIVERSITY OF HAWAII
HONOLULU, HAWAII

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Information Technology Services, University of Hawaii, Honolulu,
Hawaii

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**IT IS THE RESPONSIBILITY OF ALL BIDDERS TO CHECK THE TABLE OF CONTENTS
TO CONFIRM THAT ALL PAGES LISTED THEREIN ARE CONTAINED IN THEIR BID
PACKAGE.**

BIDDER'S REMINDER:

Tax Clearance Certificate or OPRM Form 128, CERTIFICATION FOR TAX
CLEARANCE, (see Special Provisions).

NOTICE TO BIDDERS

BID FORMS for IFB No. 97-095, Audio Visual Equipment, will be available from and received in the OFFICE OF PROCUREMENT, PROPERTY AND RISK MANAGEMENT, UNIVERSITY OF HAWAII, 1400 LOWER CAMPUS ROAD, ROOM 15, HONOLULU, HAWAII 96822, (an unofficial copy of the IFB is available on the Internet at <http://www.state.hi.us/bids/notice01.htm>) and must be submitted no later than 2:30 p.m., June 3, 1997, and at that time will be publicly opened.

Bids received after the time and date fixed for opening will not be considered.

Vendors located outside the Island of Oahu, Hawaii, USA, may request an official copy of the IFB by providing the vendor's name, address, contact person, telephone number, facsimile number, and an account number, billable to the receiver, for express shipment. Requests may be submitted via facsimile, (808) 956-2093. Direct all questions to Karlee Hisashima, (808) 956-8674.

Kenneth P. Mortimer
President, University of
Hawaii and Chancellor,
University of Hawaii at Manoa

Advertised: Honolulu Advertiser
Issue of: May 22, 1997

NOTICE TO BIDDERS

OPPRM FORM 115

BUSINESS CLASSIFICATION CERTIFICATION STATEMENT

(See Official Document)

BID FORM
TO
FURNISH AND DELIVER
AUDIO VISUAL EQUIPMENT

Office of Procurement, Property
and Risk Management
University of Hawaii
1400 Lower Campus Road, Room 15
Honolulu, Hawaii 96822

To Whom It May Concern:

The undersigned has carefully examined the INVITATION FOR BIDS (IFB) NO. 97-095, TO FURNISH AND DELIVER AUDIO VISUAL EQUIPMENT FOR INFORMATION TECHNOLOGY SERVICES, UNIVERSITY OF HAWAII, HONOLULU, HAWAII, and offers to furnish and deliver the audio visual equipment to Information Technology Services, University of Hawaii, 2525 Correa Road, Building 37, Honolulu, Hawaii 96822, in strict accordance with the true intent and meaning of the Invitation for Bids (IFB) and shall complete delivery within NINETY (90) consecutive calendar days from the date designated in the Notice to Proceed, as follows:

BASIC BID

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
1.	TBC/Frame Synchronizer, Digital Processing Systems, Inc., Model DPS-220, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
2.	19" Color Picture Monitor, Sony PVM 1954Q, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
3.	S-VHS, Video Player/ Recorder, Panasonic AG-1980, or acceptable alternate, as per Technical Specifications.	7	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
4.	Visual Presenter, Elmo EV-368, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
5.	Video Switcher, Sony Model BVS 3100, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
6.	Audio Analyzer/Generator, Tektronix Model AM 70, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
7.	Test Generator, Tektronix Model TSG 95, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
8.	27" Color Television Receiver/Monitor, as per Technical Specifications.	4	\$_____	\$_____
	Manufacturer and Model No. Offered _____			

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
9.	Telephone Interface, Gentner Digital Hybrid I, or acceptable alternate, as per Technical Specifications.	3	\$_____	\$_____
	Manufacturer and Model No. Offered			

10.	Scan Converter, Jovian Model Genie, or acceptable alternate as per Technical Specifications.	2	\$_____	\$_____
	Manufacturer and Model No. Offered			

11.	Camera Control Unit, Sony CCU-M5, or acceptable alternate as per Technical Specifications.	3	\$_____	\$_____
	Manufacturer and Model No. Offered			

12.	Upgrade of existing battery charge/discharge equipment which will increase the life of BP-90 television camera batteries:			
a.	Automatic Test Module, Anton Bauer Model DM4, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered			

b.	Automatic Discharge Module, Anton Bauer Automatic Discharge Module, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered			

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
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c.	Power Strap Cable, Anton Bauer CA-30, or acceptable alternate, as per Technical Specifications.	1		\$_____
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Manufacturer and Model No. Offered

TOTAL AMOUNT FOR ITEM 12 \$_____

13. Wireless Microphone System

This system will include TWO (2) separate mic sub-systems, whose receivers and antenna distribution system will be housed in one equipment rack. Components making up the system are Lavalier mics, body packs, base stations, antenna distribution system.

a.	Lavalier Microphone, as per Technical Specifications.	2	\$_____	\$_____
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b.	Body Pack, Vega Model BT-2020, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
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Manufacturer and Model No. Offered

c.	Receiver, Vega Model R-2020, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
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Manufacturer and Model No. Offered

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
d.	Multicoupler, Vega Model MC-2020, (for antenna distribution), or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered			

TOTAL AMOUNT FOR ITEM 13				\$_____
14.	Audio Mixer, Shure Model M267, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
	Manufacturer and Model No. Offered			

15.	Microphones and table top mic stands:			
a.	Microphone, Shure Model, SM58s, or acceptable alternate, as per Technical Specifications.	4	\$_____	\$_____
	Manufacturer and Model No. Offered			

b.	Microphone Stand, table top for SM58s, as per Technical Specifications.	4	\$_____	\$_____
TOTAL AMOUNT FOR ITEM 15				\$_____
16.	Slide-to-Video Converter, Elmo Model TRV-35G, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered			

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
17.	Television Modulators, as per Technical Specifications.	6	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
18.	Still Store System, Leitch Model DSF-3112 SC-FX, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
19.	Intercom Components required to expand an existing RTS system:			
a.	Programmable User Station, RTS Model MCE 325, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
b.	Modular Speaker, RTS Model MCS 325, or acceptable alternate, as per Technical Specifications.	4	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
c.	Tandem Mounting Kit, RTS Model MCP 4, or acceptable alternate, as per Technical Specifications.	4	\$_____	\$_____
	Manufacturer and Model No. Offered _____			

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
d.	Handheld Microphone, RTS Model MCP 7, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
e.	Beltpack Intercom Station, RTS Model BP 325, or acceptable alternate, as per Technical Specifications.	3	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
f.	System Interface, RTS Model SSA-324A, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
g.	Power Supply, RTS Model PS-15, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
h.	Side-by-Side Mounting Kit, RTS Model MCP-1, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
	Manufacturer and Model No. Offered _____			

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
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i.	Panel Mount Microphone, 12" RTS Model MCP-5, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
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Manufacturer and Model No. Offered

TOTAL AMOUNT FOR ITEM 19 \$_____

20. Equipment rack components
required to expand existing
racks:

a.	Slope Module, Winsted #86010, or acceptable alternate, as per Technical Specifications.	4	\$_____	\$_____
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Manufacturer and Model No. Offered

b.	Side Panels, Winsted #85130, or acceptable alternate, as per Technical Specifications.	1		\$_____
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Manufacturer and Model No. Offered

c.	End Top Panel for 26" Module, Winsted #85044, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
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Manufacturer and Model No. Offered

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Amount</u>
d.	Center Top Panel for 26" Module, Winsted Model #85043, or acceptable alternate, as per Technical Specifications.	2	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
e.	Stationery Shelf, Winsted Model #86088, or acceptable alternate, as per Technical Specifications.	4	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
f.	Back Panel, Winsted Model #85105, or acceptable alternate, as per Technical Specifications.	4	\$_____	\$_____
	Manufacturer and Model No. Offered _____			
g.	Rack Mountable Compact Disk Bin, Winsted Model #60725, or acceptable alternate, as per Technical Specifications.	1		\$_____
	Manufacturer and Model No. Offered _____			
TOTAL AMOUNT FOR ITEM 20				\$_____

All prices are f.o.b. destination, including all applicable taxes.

Bidders do not need to bid on all items to be considered for award
however, bidders must bid on all sub-items within an item.

TAX LIABILITY

Both out-of-state and Hawaii bidders are advised that the amount bid on this solicitation is subject to the general excise tax (currently 4%) imposed by Chapter 237, Hawaii Revised Statutes (HRS) and, if tangible property is being imported into the State of Hawaii for resale, the use tax (currently 1/2%) imposed by Chapter 238, HRS. (Refer to Tax Clearance in the Special Provisions and Taxes in the General Provisions.) Bidders are therefore cautioned to consider such taxes in formulating their bids since no adjustments to the prices bid shall be allowed.

BASIS FOR AWARD

The award of contract, if awarded, shall be made to the lowest responsive and responsible bidder for **EACH ITEM**.

ADDITIONAL QUANTITY

The University reserves the right to increase any item or sub-item at the time of award and/or not make award of any item and the Contractor(s) agrees to furnish and deliver the additional quantity at the unit bid prices quoted herein.

NOTE TO BIDDERS

An acceptable bid must conform in all material respects to this Invitation for Bids. Any of the following may be grounds for disqualification:

1. Taking exception to any of the specifications, terms or conditions contained in the IFB.
2. Placing conditions on the furnishing of solicited goods or services.
3. Inclusion of a quotation or order form containing additional specifications, terms or conditions.
4. Referencing external documents containing additional specifications, terms or conditions.

Bidders are advised that bids are evaluated as submitted and requests by bidders to delete conditions contained in their bids after bid opening cannot be considered.

REMITTANCE ADDRESS

In the event that the undersigned is awarded this contract and its remittance address differs from the address shown on the next page, please indicate remittance address below:

Street Address or P. O. Box

City State Zip Code

SIGNATURE PAGE
(See Official Document)

CERTIFICATION FOR TAX CLEARANCE

RE: IFB No.: _____

Project/Title: _____

I certify that I have submitted a State and IRS tax clearance application (DOTAX Form A-6) by mail on _____, (date)
and have not received an original or certified copy at the time I submitted this offer.

Upon receipt of a tax clearance, I will immediately send an original or certified copy by mail to:

Office of Procurement, Property
and Risk Management
University of Hawaii
1400 Lower Campus Road, Room 15
Honolulu, Hawaii 96822

Signature (Original): _____

Printed Name: _____

Title: _____

Company Name: _____

Date: _____

TECHNICAL SPECIFICATIONS

This section indicates the Technical Specifications required for the Audio Visual Equipment required. The Technical Specifications listed herein are the minimum requirements and are mandatory for an accepted bid.

Item 1: **TBC/Frame Synchronizer, Digital Processing Systems Inc., model DPS-220, or acceptable alternate**

The TBC/Frame Synchronizer will be used to lock remote video feeds to local sync and also to correct time-based errors S-VHS or Hi-8 playback.

Features: Capable of time base correcting S-VHS and H-8
Freeze frame/ freeze field, field 1 or field 2
Capable of both Direct and Hetrodyne modes
Video, setup, color and hue controls on front panel
Video Bypass switch, video bypassed on power down

Power: Built-in power supply 115-120vac, 60 hz

Input: Composite NTSC video 1v p-p, 75 ohms

Output: Composite NTSC video, 1v p-p, 75 ohms

Genlock: Composite NTSC video, or color black, loop thru

General: Full frame memory
Rackmountable in a 19" EIA standard equipment rack
2 RU or less in height
Comb filter
2 degrees of less differential phase
2% or less differential gain
H and SC phase controls
All composite video connectors BNC
Drop out compensator included
0 to 6 mhz bandwidth, +0.5/-3db
Greater than 58db luminance signal to noise

Item 2: **19" Color Picture Monitor, Sony, PVM 1954Q or acceptable alternate**

Features: H/V delay capable
Underscan
Blue only mode
Preset positions for contrast, brightness, chroma, aperture and hue controls
Caption vision decoder
Manual degauss

Power: Built-in power supply, 115-120vac, 60hz

Input: 2 or more Composite NTSC video, 1v p-p, 75ohms
connectors - BNC - loop thru
External sync - BNC- loop thru

General: 600 lines resolution minimum
comb filter
Metal cabinet
Table top mount

Item 3: S-VHS, Video Player/Recorder, Panasonic, AG-1980, or acceptable alternate

Features: Built-in full field TBC
Hi fi stereo audio
Insert / Assemble editing
Jog / shuttle dial
Auto head cleaning
Digital tracking
181-channel TV tuner
3 speed playback - SP / LP / SLP
2 speed record - SP / SLP
Digital noise reduction

Physical: No more than 17.75 inches wide (must fit inside a
19" standard EIA rack)

Power: Built-in power supply, 115 to 120vac, 60hz

Input: Video - RF and NTSC composite, 1v p-p
Audio - Stereo

Output: Video - NTSC composite, 1v p-p
Audio - Stereo

General: Flying erase head

Item 4: Visual Presenter, Elmo, EV-368 or acceptable alternate

Features: Built-in light box
Preset and manual iris control
Manual focus and zoom controls
selectable, auto or manual white balance
Use with slides, transparencies, negatives or opaques
Genlock

Power: Built-in power supply, 115 to 120vac, 60hz

Output: 2, NTSC composite video, 1v p-p

General: Greater than 400 lines horizontal resolution
 CCD video pickup(s)
 360,000 or more pixels
 H and SC phase controls
 Camera covers 12" X 9" area or greater, when zoomed wide

Item 5: Video Switcher, Sony Model BVS 3100, or acceptable alternate

Features: Fully compatible with Sony DME 450
 8 or more primary video inputs, plus black and adjustable color background
 Multi-layered mix/effects
 Built-in special effects generator
 Keyer with external key input included with Mix/Effects banks
 Master fade to black
 RGB chroma keyer
 Linear down stream keyer (DSK)/with external key input
 Border, drop shadow and outline available on the DSK
 Manual or Auto Transition feature with flip-flop from preset to program
 Adjustable box mask and external key mask available to M/E and DSK
 Built-in sync generator, capable of external genlock

Power: Built-in power supply, 115 to 120vac, 60hz

Input: All primary video inputs are NTSC composite, loop thru, 1v p-p, 75ohms
 Genlock - loop thru, 75 ohms, BNC
 External key - 75ohms, BNC

Output: 2 or more program outputs
 1 or more preset outputs
 3 or more black burst reference video outputs
 Tally

General: H and SC-phase controls (in genlock mode)
 Video inputs and outputs are composite NTSC, 1v p-p, 75 ohms
 Rackmount kit included for EIA, 19" rack
 All video and sync connectors BNC

Item 6: Audio Analyzer/Generator, Tektronix, Model AM 70 or acceptable alternate

Features: Handheld
 Battery or ac powered
 NICAD batteries and charger included
 Balanced analog output
 Balanced analog input
 Internal speaker and headphone jack

Output: Balanced
 Voltage range -99 to 0 db
 Noise floor -110db
 Response 20hz to 20khz

Generator
 Signals: Sinewave with amplitude and frequency programmable
 Stepped-frequency sinewave signals (25hz to 20khz),
 amplitude is programmable
 Stepped-amplitude sinewave signals (-60 to 0db),
 frequency is programmable
 White noise
 Pink noise

Item 7: Test Generator, Tektronix, Model TSG 95 or acceptable alternate

Features: Handheld
 Battery or ac powered

Output: NTSC composite video, 1v p-p
 BNC connector

Generator
 Signals: SMPTE bars
 75% bars
 Multiburst
 NTC7 composite
 NTC7 combination
 FCC composite
 5-step grey scale
 Red field
 Field square wave
 50 ire flat field
 Black burst
 (Sin x)/x
 Convergence
 Matrix
 Safe Area

Item 8: 27" Color Television Receiver/Monitor

Features: 181 channel capacity
 27", measured diagonally
 A/V input(s)
 Closed captioning

Power: Built-in power supply, 115 to 120vac, 60hz

Input: RF and NTSC composite (A/V)

General: 650 lines h-resolution or better
Comb filter
Warranty - minimum 1 year parts and labor

Item 9: Telephone Interface, Gentner, Digital Hybrid I or acceptable alternate

The telephone interface is used to convert a telephone conversation to audio usable in a standard television control room.

Power: 115v to 120vac, 60hz

Input: Audio - Balanced, XLR
Telephone - RJ 11

Output: Audio - Balanced, XLR
Telephone - RJ 11

General: Digital hybrid
Greater than 16-bit processing
Greater than 10khz sampling rate
Automatic and continuous nulling
Internal test tone generator
Rack mountable in 19" EIA rack

Item 10: Scan Converter, Jovian, Model Genie or acceptable alternate

Features: Mac and VGA compatible
Freeze frame
Anti-flicker
Genlock input
Gain control
No software required
Underscan

Power: Built-in power supply, 115 to 120vac, 60 hz

Input: Mac and VGA, loop thru inputs
Up to 640 X 480 resolution inputs

Output: Composite NTSC video
S video

Item 11: Camera Control Unit, Sony, Model CCU-M5

The camera control unit(s) will be connected to previously acquired Sony Model DXC-327 video camera(s).

Features: Must be fully compatible with Sony model DXC-327 camera
Selectable auto or manual iris control
Preset, auto and manual white and black balance
Setup control
Built-in colorbar generator
3 or more gain settings
H and SC-phase controls

Power: Built-in power supply, 115 to 120vac, 60 hz

Input: Connector - Compatible with Sony CCQ25AM/US cable

Output: 2 or more NTSC composite video, 1v p-p outputs
R,G,B outputs

General: Rackmount 19" EIA
Genlock, loop through
All video and sync connectors are BNC

Item 12a: Automatic Test Module, Anton Bauer Model DM4 or acceptable alternate

This accessory will connect to the diagnostic port of a previously acquired Anton Bauer model MP-4D charger for BP-90 video camera batteries. The Automatic test module will perform diagnostics for proper battery maintenance.

Features: Performs automatic diagnostics, calibration and revitalization of BP-90 batteries

General: Fully compatible with Anton Bauer Model MP-4D

Item 12b: Automatic Discharge Module, Anton Bauer Automatic Discharge Module or acceptable alternate

This accessory will connect to and work with a previously acquired Anton Bauer model MP4D Battery Charger and also an Anton Bauer Automatic Test Module. The combined components will aid in maximizing, BP-90 video camera battery life.

General: Fully compatible with Anton Bauer Model MP4D Battery Charger and DM4 Automatic Test Module.

Item 12c: Power Strap Cable, Anton Bauer CA-30 or acceptable alternate

This cable connects 12 to 14v type batteries to the Anton Bauer Automatic Discharge Module.

General: Triconn to 5-pin XLR

Item 13a: Lavalier Microphone

This microphone connects to the Body Pack of a wireless microphone system.

Features: Lapel clip

General: Fully compatible with Vega Model BT 2020 body pack
Type 4-pin Tini QG connector (TA4F)
Minimum 50 to 15,000 khz bandwidth

Item 13b: Body Pack, Vega Model, BT-2020, or acceptable alternate

Features: Power on / off control
Mute on / off control
Mic level control, with 30db range
100-channel frequency agile

Power: 9v battery
NICAD battery acceptable
Greater than 7 hours battery life

Input: 4-pin Tini QG (TA4F) connector type

Output: 50mw or greater
1/4 wave flexible whip antenna
100 channels available in either of 2 bands within 746 to
782mhz(match band with item 13C)

General: Better than +/- 0.005% frequency stability
Spurious output - Less than -54db
Less than 7 oz. including battery
Does not exceed the following dimensions: 4" X 3" X 1"

Item 13c: Receiver, Vega Model R-2020 or acceptable alternate

Features: Fully compatible with Vega Model BT-2020 (Body pack)
Frequency-synthesized dual-receiver diversity
Power on / off control
Frequency (channel) select controls
Squelch control
RF level meter
Audio level meter
100 channels (frequency agile)

Power: 115 to 120vac, 60 hz

Output: Line level; -26 to +4 dbm

General: 50 to 15,000hz, +/- 1.5db
Greater than 70db image rejection
2.5uV for 50db SNR sensitivity
Rack mountable in 19" EIA standard rack (include
rackmount kit, if needed)
Greater than 102 db s/n (A-weighted)

Item 13d: Multicoupler, Vega Model MC-2020 or acceptable alternate

The multicoupler receives and then distributes RF signals to 1 or more receivers.

Power: 115 to 120v, 60 hz

General: Rack mountable in 19" EIA standard rack (include
rackmount kit, if needed)

Item 14: Audio Mixer, Shure Model M267 or acceptable alternate

Features: 4 or more XLR transformer - balanced inputs
1 or more balanced outputs
Built-in tone oscillator
VU meter
LED peak indicator
Switchable limiter
Mic / line switch on each input
Phantom power supply

Power: 115 to 120vac, 60 hz

Input: Line or mic levels, 600 ohms, balanced

Output: Line level, 600 Ohms, balanced

General: 30 to 20,000 hz or greater bandwidth

Item 15a: Microphone, Shure Model SM 58S or acceptable alternate

Features: On/off switch

General: 50 to 15,000 hz or greater frequency response
Cardioid pattern
Dynamic element
All metal construction

Output: XLR, balanced output

Item 15b: Microphone Stand

Features: Fully compatible with Shure Model SM 58S, Microphone

General: Table top stand
8 to 14 inches high
All metal construction
Rubber base footing

Item 16: **Slide to Video Converter, Elmo Model TRV-35G or acceptable alternate**

Features: Compatible with standard 80-slide circular tray
Color CCD video pickup
Adjustable iris and focus
Preset or manual color-tone control
H and SC phase controls

Output: 1v p-p, NTSC video
BNC connector

General: 300,000 or more pixels
Greater than 370 lines horizontal resolution
Genlockable, BNC connector
6.5 - 16.25mm, f/1.8, built-in zoom lens
Remote control unit and cable included

Item 17: **Television Modulator**

Features: Frequency Agile (channels 2 to 13 standard EIA frequencies included)
Power on/off switch
Channel selector switch/es
RF output level control
Video modulation control
Audio carrier level control
Audio deviation control

Power: Built-in power supply, 115 to 120vac, 60 hz

Output: Greater than 55dbmV output, adjustable
Spurious Output: less than -55db at 55 dbmV

General: 19" EIA standard rackmountable
Uses 2RU or less rack space
Capable of 87.5% modulation with 1v p-p, NTSC video input
600 ohms, balanced audio input
4.5mhz audio carrier
+/- 25khz audio deviation
Audio response: +/- 2db, 50 hz to 13khz or better

Item 18: **Still Store System, Leitch Model DSF-3112 SC-FX, or acceptable alternate**

Features: Grabs color pictures from any NTSC, composite video source
 Preview Channel
 Second output channel
 Dual Channel, capable of cuts, dissolves and special effects transitions with variable effects duration.
 5,000 or more fields of storage on basic system, expandable.
 Remote control.

Power: Built-in power supply, 115 to 120vac, 60 hz

Input: One or more NTSC composite video, 1v p-p, 75 ohms

Output: Two or more channels of NTSC composite video, 1v p-p, 75 ohms

Genlock: Composite NTSC video or color black, loop thru

General: 8 Bit, or more sampling
 All composite video connectors BNC
 H and SC phase controls
 RS-170A compliant
 4.5 mhz frequency response, +/-0.15db, or better
 Less than 70db signal to noise
 Less than 2% differential gain
 Less than 1% differential phase

Item 19a: **Programmable User Station, RTS Model MCE 325, or acceptable alternate**

Features: 4 channel, programmable
 Headset (or optional speaker) station
 Call signalling - inaudible 20khz signal to activate call indicator
 Remote talk off - active, unattended remote station mics, may be deactivated
 VOX circuit - programmable voice activated microphones
 IFB - program audio assigned to channel is interrupted during talk
 Microphone limiter
 Microphone jack on front panel

Power: Built-in power supply, 115 to 120vac, 60 hz

General: Fully compatible with RTS Model PS 31 and
RTS Model SAP 612
100hz to 8khz, +/- 3% frequency response for Microphone
preamp.
Headphone amp and speaker amp.
200 ohm line
-90dbu Noise contribution to 200 ohm line

**Item 19b: Modular Speaker, RTS Model MCS 325 or acceptable
alternate**

Fully compatible with RTS Model MCE 325
8 ohms impedance

Fully compatible with RTS Model MCE 325
8 ohms impedance

**Item 19c: Tandem Mounting Kit, RTS Model MCP 4, or acceptable
alternate**

General: Fully compatible with RTS Model MCE 325 and MCS 325

**Item 19d: Handheld Microphone, RTS Model MCP 7, or acceptable
alternate**

Fully compatible with RTS Model MCE 325

**Item 19e: Belt-Pack Intercom Station, RTS Model BP 325 or
acceptable alternate**

Power: + 18 to +35 volts dc, input power
Input: -10 to +8dbu nominal
1,000 ohms , balanced
100hz to 12 khz, +/- 3db frequency response
Connector - XLR-3-31 female receptacle
pin 1 - common, pin 2 - chl audio and dc, pin 3 - audio

General: Fully compatible with RTS model MCE 325
10,000 ohms impedance across intercom line
Line loop connector - XLR-3-32 male receptacle
pin 1 - common, pin 2- chl audio and dc,
pin 3 - ch2 audio

**Item 19f: System Interface, RTS Model SSA-324A or acceptable
alternate**

Output: Fully compatible with RTS Model PS 31, RTS Model PS 15,
RTS Model SAP 612 and RTS Model MCE 325.
2-wire output - 10,000 ohms +100%, -20% for differential
4-wire output - less than 200 ohms for differential

Input: 2-wire input - 10,000 ohms +100%, -20% differential, and
-20dbu to +10dbu, nominal
4-wire input - 20,000 ohms minimum for differential, and
-10dbu to +8dbu nominal

Frequency Response: 4 wire in to 2-wire out - 200 hz to 5khz +/- 3db, typical
2 wire in to 4-wire out - 250hz to 5khz +/- 3db, typical

Signal to Noise: Less than -60bd

Power: Built-in power supply, 115v to 120vac, 60 hz

General: 1RU or less in height

Item 19g: Power Supply, RTS Model PS-15 or acceptable alternate

Power: Built-in power supply, 115 to 120vac, 60 hz
Less than 0.6 amps

Output: 32.0 +/-1volt no load voltage, 24v full load nominal
Switchable 200 or 400 ohms
2.0v peak to peak nominal, 5.0v peak to peak maximum

General: Fully compatible with RTS Model MCE 325, BP-325,
and SSA-324
Better than 60db signal-to-noise
1RU or less in height

Item 19h: Side by Side Mount Kit, RTS Model MCP-1, or acceptable alternate

General: Fully compatible with RTS Model PS-15 and MCE 325

Item 19i: Panel Mount Microphone, 12", RTS Model MCP-5 or acceptable alternate

General: Fully compatible with RTS Model MCE 325

Item 20a: Slope Module, Winsted #86010, or acceptable alternate

19-1/4 inches (11RU)
9 degrees tilt
21-5/16" H X 21-1/16" W X 26" D
Fully compatible with Winsted 26" Basic Consoles

Item 20b: Side panels, Winsted #85130, or acceptable alternate

Fully compatible with Winsted Model #86010
Pair (both left and right sides)
3/4" wide
Vented

Item 20c: End Top Panel for 26" Module, Winsted #85044, or acceptable alternate

Fully compatible with Winsted Model #86010
21-13/16" W

Item 20d: Center Top panel, Winsted Model #85043, or acceptable alternate

Fully compatible with Winsted Model #86010
21-1/16" W

Item 20e: Stationary Shelf, Winsted Model #86088, or acceptable alternate

Fully compatible with Winsted racks with inner rack rails
1/2"H X 18-1/2"W X 20-1/4"D

Item 20f: Back Panel, Winsted Model #85105, or acceptable alternate

Fully compatible with Winsted Model #86010

Item 20g: Rack Mountable Compact Disk Bin, Winsted Model #60725, or acceptable alternate

Fully compatible with Winsted 26" Basic Consoles

All questions pertaining to the Technical Specifications shall be directed to Mr. Gary Murakami, Electronics Engineer, telephone (808) 956-4026.

Bidders are cautioned to review the Technical Specifications carefully and thoroughly. Objections to or requests for clarification of the specifications shall be made in writing in accordance with the General Provisions to the Office of Procurement, Property and Risk Management prior to the submittal of a bid. The submittal of a bid shall be considered as acceptance of the specifications as published.

SPECIAL PROVISIONS

1. SCOPE

The furnishing and deliver of audio visual equipment shall be in accordance with the terms and conditions of IFB No. 97-085 and the General Provisions dated February 23, 1996 included by reference. Copies of the General Provisions are available at the Office of Procurement, Property and Risk Management, University of Hawaii, 1400 Lower Campus Road, Room 15, Honolulu, Hawaii 96822 or the General Provisions may be viewed at: <http://www.state.hi.us/bids/notice03.htm>

2. TECHNICAL REPRESENTATIVE OF THE PROCUREMENT OFFICER (TRPO)

The Technical Representative of the Procurement Officer is Mr. Gary Murakami, Electronics Engineer, telephone (808) 956-4026.

3. SUBMITTAL OF TECHNICAL DATA

With their bids, bidders shall submit, in duplicate, manufacturer's literature or brochures with technical data and illustrations of the audio visual equipment being offered. Bidders offering item(s) as specified are not required to submit literature, brochures, etc.

4. BRAND NAME OR ACCEPTABLE ALTERNATE

The brand names and model number(s) mentioned are used in this specification as a measure of quality and performance. Any brand or manufacture of comparable or better quality and performance than that specified will be considered for acceptance by the University. However, the University reserves the right to reject and deny any substitution that it may, in its discretion, deem unacceptable, and the findings in this regard shall be accepted by the bidder as final and binding.

5. DELIVERY

Prior to delivery, the Contractor shall contact the Technical Representative to coordinate delivery of the audio visual equipment.

6. MANUALS AND INSTRUCTIONS

The Contractor shall provide the University with operating manuals and instructions for all equipment, items, and sub-items delivered to the University in the amount equivalent to the quantity of each item ordered.

7. WARRANTY

The equipment furnished shall be new and as specified. The Contractor shall warrant that all workmanship and materials of equipment furnished under this contract shall be guaranteed for a period of ONE (1) year from the date of acceptance. The Contractor shall replace and/or repair any defective workmanship and/or materials at no cost to the University during the period of warranty, provided such defects are not due to abuse or negligence on the part of the University.

8. PURCHASE ORDER

Notwithstanding General Provision 3.3, Execution of Contract, if the award is less than \$10,000, the University reserves the right to issue a purchase order.

9. INQUIRIES

All inquiries shall be made in writing to the following:

Office of Procurement, Property and Risk Management
University of Hawaii
1400 Lower Campus Road, Room 15
Honolulu, Hawaii 96822
Attn: Karlee Hisashima
Buyer

Telephone: (808) 956-8674
Facsimile: (808) 956-2093

10. TAX CLEARANCE FOR CONTRACTS

In accordance with Section 103-53, HRS, bidders shall submit with their bid packages, original tax clearances from the State of Hawaii Department of Taxation and the Internal Revenue Service. In the event bidders are unable to obtain a tax clearance by mail in time to include it with their bid packages, bidders may submit a completed OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, in place of the DOTAX Form A-6, with their bid packages. However, an original tax clearance must be provided before contract award. Tax clearances obtained shall certify that all tax returns due have been filed, and all taxes, interest, and penalties levied or accrued under the provisions of Title 14 that are administered by the State of Hawaii Department of Taxation and under the Internal Revenue Code against the bidder, have been paid. This shall apply to all contracts, whether with Hawaii bidders, out-of-state bidders, or nonprofit organizations.

This shall not apply to bidders if the State of Hawaii Department of Taxation certifies that the bidder is in good standing under a plan in which delinquent taxes are being paid to the State of Hawaii Department of Taxation (and the Internal Revenue Service, if applicable) in installments.

Offers that are not accompanied by original tax clearances or OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, may be considered as non-responsive and may be rejected.

Any questions pertaining to tax clearances may be addressed to the following:

- a. Internal Revenue Service, Compliance Division - LTC
300 Ala Moana Boulevard, #50089
Honolulu, Hawaii 96850-4922
Telephone No.: (808) 541-1160
- b. Department of Taxation
State of Hawaii
Oahu District Office
P.O. Box 259
Honolulu, Hawaii 96808-0259
Telephone No.: (808) 587-4242
Toll-Free: 1-800-222-3229

11. TAX CLEARANCE FOR FINAL PAYMENT

General Provision 7.2 entitled Tax Clearance, is hereby deleted and shall be replaced by the following:

TAX CLEARANCE FOR FINAL PAYMENT

In accordance with Section 103-53, HRS, final payment for the settlement of the contract will not be made by the University until the Contractor has submitted to the University original tax clearances from the State of Hawaii Department of Taxation and the Internal Revenue Service. Tax clearance shall certify that all tax returns due have been filed, and all taxes, interest, and penalties levied or accrued under the provisions of Title 14 that are administered by the State of Hawaii Department of Taxation and under the Internal Revenue Code against the Contractor have been paid.

Notwithstanding Sections 40-57 and 40-58, HRS, if a Contractor fails to provide the original tax clearances within SIX (6) months of the notice of final settlement or completion date of the contract, the University shall assign the final settlement payment in an amount not to exceed the tax liability to the State of Hawaii Department of Taxation or Internal Revenue Service, provided that the State of Hawaii Department of Taxation

may first offset its tax debt against the sum owed to the Contractor. This shall apply to all contracts whether with Hawaii vendors, out-of-state vendors, or nonprofit organizations.

The foregoing shall not apply to the Contractor if the State of Hawaii Department of Taxation certifies that the Contractor is in good standing under a plan in which delinquent taxes are being paid to the State of Hawaii Department of Taxation (and the Internal Revenue Service, if applicable) in installments.

Any questions pertaining to tax clearances may be addressed to the following:

- a. Internal Revenue Service, Compliance
Division - LTC
300 Ala Moana Boulevard, #50089
Honolulu, Hawaii 96850-4922
Telephone No.: (808) 541-1160
- b. Department of Taxation
State of Hawaii
Oahu District Office
P.O. Box 259
Honolulu, Hawaii 96808-0259
Telephone No.: (808) 587-4242
Toll-Free: 1-800-222-3229

12. PAYMENT

The Contractor shall be remunerated upon submission of a properly executed original invoice and ONE (1) copy, indicating the contract number, to University of Hawaii, Information Technology Services, Administrative Services, 2425 Campus Road, Sinclair Library 10, Honolulu, Hawaii 96822, no later than THIRTY (30) calendar days following submission of invoice or the acceptance of equipment.